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BIRDS COLLECTED BY W. W. BROWN, JR., ON CERROS, SAN BENITO  
AND NATIVIDAD ISLANDS IN THE SPRING OF 1906, WITH  
NOTES ON THE BIOTA OF THE ISLANDS

By JOHN E. THAYER and OUTRAM BANGS

THE following lists and notes, based on birds collected on Cerros, San Benito and Natividad Islands off the northern coast of Lower California by W. W. Brown, Jr., in the spring of 1906, may add a little to our knowledge of the ornithology of these barren, inaccessible islands. The field was in no sense a new one, such good bird collectors as Streets, Belding and Anthony having worked it; but it was desirable to get more specimens of some of the species found there, especially the three small land birds peculiar to the islands—*Thryomanes bewickii cerroensis* (Anthony) of Cerros, and *Carpodacus mcgregori* Anthony and *Passerculus rustratus sanctorum* (Ridg.) of San Benito.

Most of the literature bearing on the ornithology of these islands is rather fragmentary consisting of brief descriptions of new forms, or short notes on the breeding or other habits of some of the birds. Belding, however, published (Proc. U. S. Nat. Mus. Vol. 5, pp. 530 to 532, 1882) a list of twenty species of birds seen or taken by himself during a stay of twelve days in April, on Cerros Island. Anthony's descriptions of new forms and accounts of the breeding of petrels and other birds are scattered, but appeared chiefly in the *Auk*.

In the spring of 1906, W. W. Brown, Jr., visited these islands while on his way to Guadalupe and made small collections of birds, mammals and reptiles. He sailed from San Quentin, accompanied by Mr. H. W. Marsden as assistant, on the little schooner "La Fria" of ten tons burden on March 25, reaching Cerros Island in twenty-four hours. Here he planned to stay a week and a vessel was to call for him at the end of that time, but for some reason never explained a month elapsed before the "Santa Barbara," fourteen tons burden, came to take him off. This delay was serious as there were so few birds on Cerros that it was a waste of time staying there and it delayed his visit to Guadalupe till much later in the season than he had planned reaching there.

During this month Mr. Brown and Mr. Marsden made a short trip to Natividad Island; they, however, found no small land birds there.

On April 24, Brown and Marsden accompanied by Ignacio Oroso, a Mexican hunter, sailed from Cerros for Guadalupe, but made a stop of two days at the San Benito Islands.

In another paper we intend giving an account of Mr. Brown's experiences among the birds of Guadalupe and here only list such species as he took on the three smaller islands that he visited on his way thither. An account of each island, taken from Mr. Brown's notes, precedes the list of birds that he secured there.

CERROS ISLAND

"Cerros Island is nearly twenty-one miles long, north and south, and in width it varies from three miles near its northern end to nine miles near its southern end. The southern end of the island is twelve and one-half miles from the mainland of the Peninsula of Lower California. It is of volcanic origin, a mass of high, abrupt peaks, the highest being 3950 feet in altitude. The northern part of Cerros is comparatively fertile, the crests and northern slopes of the mountains being covered by

a growth of cedar and pine, some of which attain a height of 60 to 70 feet; the southern end of the island is however very barren.

"The domestic goat in a wild state occurs on the island and deer and rabbits are not uncommon. A *Neotoma* and a *Peromyscus* were the only small mammals we found. The shores of the island are resorted to by seals and sea-otters, tho we were unable to secure any, and the sea elephant was found there in the past." (Mr. Brown collected specimens of the following mammals, all species peculiar to Cerros Island: *Odocoileus cerrosensis* Merriam, *Sylvilagus cerrosensis* Allen, *Neotoma bryanti* Merriam, and *Peromyscus cedrosensis* Allen.)

"Birds on Cerros Island are not only extremely scarce, but are very shy. On the other islands we visited birds were tame and unsuspicious, and we were unable to account for their exceeding shyness on Cerros.

"We took specimens of three species of snakes and of five species of lizards and noted no others during our stay." (These have not yet been identified.)

**Phalacrocorax dilophus albociliatus** Ridg. One fully adult male in breeding plumage with the white plumes well developed, April 9.

**Phalacrocorax penicillatus** (Brandt). One adult female, April 20.

**Pelecanus californicus** Ridg. One female, April 9.

**Pandion haliaetus carolinensis** (Gmel.). Two adult males, March 30 and April 5.

**Arenaria melanocephala** (Vig.). Five adults of both sexes, three males and two females, March 26 to April 20.

**Hæmatopus frazari** Brewster. Three adults of both sexes, two males and one female, April 13 and April 18.

These skins vary considerably in the amount of black on the under parts, all but one showing some black spotting on the chest and under tail-coverts. One male, taken April 13, however, has the under parts much as in *H. palliatus*, with immaculate under tail-coverts, no black on the chest, and the black of the lower neck ending in an even line. It differs from *H. palliatus* mainly in its darker back and in being less purely white on sides of rump and upper tail-coverts.

**Actitis macularia** (Linn.). One adult female, April 4.

**Heteractitis incanus** (Gmel.). Ten specimens both sexes: five in the adult, spotted plumage, and five in immature gray plumage, April 2 to April 24.

**Sterna maxima** Bodd. Six specimens, adults and immature of both sexes, April 13 to April 20.

**Larus heermanni** Cassin. Two adult males, with pure white heads, April 20.

**Larus occidentalis** Aud. Five specimens, four adult females and one young male, April 1 to April 20.

**Zenaidura carolinensis carolinensis** (Linn.). Two adult males, April 15 and April 20. These do not differ in any way from rather pale individuals taken elsewhere at about the same season.

**Trochilus costæ** (Bourc.). Six specimens, both sexes; none of the males in quite full plumage; March 28 to April 8.

**Trochilus anna** (Less.). Two adult males, April 2 and April 3.

**Selasphorus rufus** (Gmel.). One female, March 30.

**Sayornis saya** (Bonap.). Two specimens, male and female. These birds are rather pale, apparently faded, but otherwise do not differ from continental specimens; they were taken on April 7 and April 17.

**Otocoris alpestris enertera** Oberholser. Eight adults, both sexes, March 26 to

April 18. This subspecies, lately described by Oberholser from Llano de Yrais, Lower California, appears to be a well-marked form.

**Mimus polyglottos leucopterus** (Vig.). Two specimens: A male and female, both adults, April 19.

**Thryomanes bewickii cerroensis** (Anthony). Thirteen specimens, including adults of both sexes, and two young, a male and a female; the adults taken March 27 to April 14, and the two young April 17.

The characters that separate this form, peculiar to Cerros Island, from *T. bewickii charienturus* of the coasts of southern California and northern Lower California, are well marked in this series, and the subspecies is a very good one.

**Salpinctes obsoletus obsoletus** (Say). Nine adults, both sexes, March 27 to April 4.

**Corvus corax clarionensis** Roth. & Hart. Four specimens, both sexes, April 4 to April 6. From the accompanying measurements of these four skins, it would seem that the raven of Cerros Island is rather nearer to *C. C. clarionensis* than to *C. corax sinuatus* of southern Mexico; all skins examined in this connection, however, from Sonora and the western United States are nearly if not quite intermediate and might almost as well be referred to one as the other race. The four skins afford the following measurements, in millimeters:

	Wing	Tail	Tarsus	Culmen	Depth of bill at nostril
A. ad. ♂	396	214	68.5	72.	25.5
B. youngish ♀	363	194	66.	65.	22.
C. ad. ♀	406	218	66.	70.	23.5
D. ad. ♀	395	216	68.	68.	23.

**Lanius ludovicianus gambeli** Ridg. Three females, two adult, one young, April 3 to April 21.

**Icterus cucullatus nelsoni** Ridg. Two specimens, a young male April 18, and a female (?) April 17.

**Astragalinus psaltria hesperophilus** Oberholser. Three specimens, two males and a female, April 1 to April 6.

**Carpodacus mexicanus clementis** (Mearns). Seven specimens, three adult males, three adult females, and one young female in nestling plumage, March 30 to April 12. This form had previously been found as far south as Todos Santos Island, Lower California; but it was a surprise to us to find that the Cerros Island bird was wholly referable to it and so very different from *C. mcgregori* of the nearby San Benito Islands.

There can be no question as to the identification of the skins. We not only worked over them very carefully ourselves, but sent them to Mr. Harry C. Oberholser who compared them with a large amount of material and pronounced them identical with specimens from the Santa Barbara Islands.

**Passerculus rostratus sanctorum**. (Ridg.). One young male, in the moult, changing from the nestling to the autumnal plumage, April 21. This individual may have been a straggler from San Benito Island, where Mr. Brown found the bird very common.

**Amphispiza bilineata deserticola** Ridg. Six specimens: four adults, both sexes, and two young males in nestling plumage, March 26 to April 7. These skins are like more northern ones, except in being a trifle smaller in all measurements.

**Spizella breweri** Cassin. One adult male, March 30.

**Zamelodia melanocephala** (Swains.). One adult female, April 12.

## NATIVIDAD ISLAND

"Natividad Island lies eight miles south of Cerros, and four miles from the mainland. It is three and three-quarter miles long, from northeast to southwest, and from half a mile to one and a half miles wide, widest at its southeastern end.

"It is a barren island, composed of rocky hills which in the middle part rise to a height of four hundred and forty-nine feet. The shores are steep and rocky bordered by detached rocks and kelp, except at the southeastern end where there is a sand beach about half a mile long.

"The vegetation of the island consists chiefly of the ice plant, which forms a carpet over the island, a tall species of cactus and a few small shrubs.

"There were seals along the shore, and these and one species of *Peromyscus*" (*Peromyscus maniculatus geronimensis* (Allen), kindly identified by Mr. W. H. Osgood) "which was very abundant appeared to constitute the mammalian fauna of Natividad. We saw several lizards.

"The beach was the resort of thousands of cormorants, and the island is noted for its guano deposits. The ground was honey-combed by the burrows of the shearwaters and Cassin auklets; most of these burrows were about five feet long, but one was ten feet. They were mostly deserted at the time of our visit, and we found but two with birds in them. We stayed but a day on Natividad and noted no small land birds."

**Ptychoramphus aleuticus** (Pall.). One adult, April 14.

**Puffinus opisthomelas** Coues. One adult male, April 14.

**Phalacrocorax penicillatus** (Brandt). One adult male, April 14.

**Falco peregrinus anatum** (Bp.). One adult male, April 14.

**Arenaria melanocephala** (Vig.). Three adult males, April 14.

**Hæmatopus frazari** Brewst. Three specimens, one male and two females (adults), April 14.

**Numenius hudsonicus** Lath. Two adult males, April 14.

**Calidris arenaria** (Linn.). Four females, April 14.

**Larus heermanni** Cassin. Two females, April 14. The males taken at this time of year on Cerros Island have pure white heads; in these two females the head is mottled grayish and brownish with a buff tinge; possibly they are not fully adult.

## THE SAN BENITO ISLANDS

"The San Benito Islands are a group of three small, rocky, barren islands surrounded by outlying rocks and kelp. They lie at their nearest point fifteen miles west of the northern end of Cerros Island, and cover an area of nearly four miles in longitude by one and a half miles in latitude. They are about fifty miles from the mainland. West Benito, the largest, has bold, rocky shores and consists of an elevated plateau with a mound near the centre six hundred feet above the sea. Middle Benito is a low flat island, its highest part only eighty-two feet above the sea. It is separated from West Benito by a passage two hundred feet wide. East Benito is the second largest and is marked by four prominent hills, the highest four hundred and twenty-one feet in altitude. The vegetation consists of the tall cactus and a few shrubs. During our stay of two days we saw no mammals. Several lizards were seen, but none were secured. Only five species of small land birds were found, and only one of these was at all abundant—the large-billed sparrow. They were quite common, and we found young just out of the nest, tho no eggs. Cassin auklets were also very abundant and were breeding in burrows in the ground. We took one egg, the other nests all containing one young one each.

Besides the birds secured we shot two examples of *Hæmatopus frazari*, but they both fell in the heavy surf among the rocks and we were unable to secure them."

**Ptychoramphus aleuticus** (Pall.). Fourteen adults of both sexes, April 26.

**Falco peregrinus anatum** (Bonap.). One adult male, April 26.

**Trochilus costæ** (Bourc.). Two specimens, April 26.

**Otocoris alpestris enertera** Oberholser. Seven adults, both sexes, April 26.

**Salpinctes obsoletus obsoletus** (Say). Two adult females, April 26.

**Carpodacus mcgregori** Anthony. Five specimens, two males, apparently adult but with no red in the plumage, one adult female, and two nearly full-grown young males, April 25 and 26.

It had been thought that this very distinct species, peculiar to these small, barren islands, was nearly if not quite extinct. Unfortunately Mr. Brown did not note how many individuals he saw during the two days he spent at the San Benito Islands.

**Passerculus rostratus sanctorum** (Ridg.). Thirteen specimens, adults of both sexes, and young. In this series there are eight breeding birds in worn plumage, four nestlings—one apparently just out of the nest—and one, probably a young of the season, in fully acquired autumnal plumage, April 25 and 26.

*Boston, Massachusetts.*

## THE WOODHOUSE JAY IN WESTERN COLORADO

By ROBERT B. ROCKWELL

THESE are few if any American birds which have received less recognition from Ornithological writers than the Woodhouse jay; hence a few observations regarding this bird may be of interest.

The writer's acquaintance with the Woodhouse jay was mostly acquired in the eastern part of Mesa County, Colorado, which is located on the western edge of the State adjoining Utah, and about the middle of the State north and south. The eastern part of the County is mountainous, ranging in altitude from 5,000 to 10,000 feet and for the most part is well watered and timbered. Thruout this section in localities ranging from 6,000 to 9,000 feet this jay is a common resident thruout the year.

During the winter months they are found in large numbers in the brush-clad gulches and ravines in the lower part of their range and usually not far from cultivated ground, where they feed largely upon grain and seed in the barn-yards, feedlots and fields. During this period they become very tame if not molested and will even occasionally slip into an open kitchen door in quest of some tempting morsel. Like the rest of the jays they are very inquisitive birds and a good deal of their time is spent "investigating." When feeding they are very quiet and seldom make any noise unless surprised or frightened.

They are at all times very cautious birds and altho they are fully as plentiful around the meat bait in coyote traps as the magpie I have never known of a jay being trapped, while large numbers of the magpies are caught in this manner.

As soon as the first feathery green appears on the scrub-oak covered hillsides Woodhouseie forgets his domestic habits of the winter and thruout the summer is seldom seen in the vicinity of the ranch houses except when on some short foraging expedition.